

Skills and Training Guidelines For Data-Related Roles

Knowledge/Skill/Ability	Training Required	Role	Level
Knowledge of basic data management principles	BLM course on data basics	All	Overview
Knowledge of data stewardship responsibilities in BLM	Data Stewardship	CIO/Group Mgr/FO Mgr/GIS Spec/GIS Mgr/ IRM Advisor/ Portfolio Manager/Program Lead/FO DA-DBA	Overview
Familiar with data modeling and analysis (conceptual familiarity)	Data modeling	Data Stewards, GIS/Spec/GIS Mgr/FO DA/DBA.	Overview
Data Quality principles and concepts	Data quality overview	Data Spec/Data Stewards/ Resource Spec/GIS Specialists/GIS Mgr/IRM Advisor/ Portfolio Manager/Program Lead/FO DA-DBA	Overview
Data repository management	Data repository training	Data Specialist	Overview
Knowledge of RDBMS concepts	RDBMS Basics	Data Specialist/Field DA-DBA	Overview
Knowledge of data architecture principles	Federal Enterprise Architecture Framework, Bureau Enterprise Architecture	Data Specialist	Technical
Data modeling	Data Modeling	Data Specialist/Field DA-DBA	Technical
Application of data architecture principles	Strategic Enterprise Modeling	Data Specialist, Database Admin.	Technical
Metadata management	Metadata management	Data Spec/GIS Mgr/FO DA-DBA	Technical
CASE tool proficiency	Vendor CASE tool class	Data Specialist/Field DA-DBA	Technical
Data integration skills (to convert, import/export, combining, and comparing data)	Process and Data Integration	Data Specialist/Field Office DA-DBA	Technical
Data planning and policy formulation	Business Data Management	Data Specialist/ IRM Advisor/ Portfolio Manager	Technical
Data repository management	Data repository tool training	Data Specialist/FO DA-DBA	Technical
Metadata requirements for spatial and alpha numeric data	USGS or in state course on FGDC Requirements class + CMR use	Data Specialist/Data Stewards/ Resource Specialist/GIS Specialist/Field DA-DBA/GIS Mgr	Technical
Knowledge of how to create data standards, business data requirements and business rules	BLM course on data standards process	Data Stews/Data Spec/IRM Advisor/ Portfolio Manager /GIS Spec/GIS Mgr/Field Office DA-DBA	Technical
Knowledge of data stewardship responsibilities in BLM	Data Stewardship	Data Stewards/Data Spec/IRM Advisor/ Portfolio Manager/ Program Lead	Technical
Expertise in data quality procedures	Data quality	Data Stewards/Data Specialist/ Program Leads	Technical
Data management principles and concepts	BLM course on data basics	Data Stews/Data Spec/GIS Spec/ GIS Mgr/Field Office DA-DBA	Technical
Detailed knowledge and skills in relational database management systems (RDBMS), including design, optimization and operation	RDBMS	Database Administrators / Field Office DA-DBA	Technical
Database archiving, back-up and restoration of data	RDBMS-data storage and retrieval administration	Database Administrators/ Field Office DA-DBA	Technical
Database security and access	RDBMS	Systems Administrators	Technical
RDBMS skills and SQL programming skills	RDBMS and SQL	Data Specialist/Field Office DA-DBA	Technical
Knowledge of XML concepts	XML basics	IRM Advisor/ Portfolio Manager GIS Mgr/GIS Spec/Data Spec/Field DA-DBA	Overview
XML Standards and Technology	XML specifics and vocabularies	GIS Mgr/GIS Spec/Data Spec/ Field DA-DBA	Technical

Data Specialist = Data Administrators, managers, architects and analysts

Overview = High-level knowledge

Technical = Demonstrated competency